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Applications of Behavioral Theories to the Study of Family Marketing Behavior

The purpose of this paper is to discuss and illustrate some applications from behavioral science concepts to the market behavior of the family. For the purposes of this paper, economics will be included as a behavioral science, since some of the concepts and applications to be discussed, and with which I am most familiar, are from economics.

One further definitional comment is that while the focus is on the behavior of the family we cannot lose sight of the fact that a family is composed of an aggregation of individuals, and that the best understanding of the behavior of the family is often obtained by disaggregating this aggregate. In other words, at times we may come close to the topic of individual behavior except that in our case the objective in studying the behavior of individuals is to obtain better insight into the market behavior of the family unit.

In a short paper, it is obviously not possible to cover all possible concepts from the behavioral sciences of use in the study of family market behavior. Rather, what will be done is to select a very few and especially promising concepts, discuss their implications from a theoretical point of view and then illustrate how they have been or might be applied to studying market behavior. In particular, we shall focus on three such concepts, namely, the role of attitudes, from social psychology; family roles in decision-making, from sociology; and the permanent income concept, from economics.

Attitudes

While economic theory has considered the ability to buy, or income, as the basic determinant of consumer purchases for at least 200 years, it was only toward the middle of this century that social psychologists and others have suggested that the desire to make a purchase should be considered as another key variable, possibly on an equal plane of importance. That this latter development has occurred fairly recently may itself be interpreted as an economic phenomenon, since it was only recently that this nation and others have reached a stage of affluence where most consumers can choose to make purchases not as a matter of necessity but as a matter of preference.

While economists were not unaware of this trend (for example, there are discussions in the economics literature of over 30 years ago on means of estimating discretionary income), the idea has been pushed and developed to a much greater extent by other social sciences. In particular, George Katona managed to gain wide acceptance for the importance of desire to buy by quantifying this concept in terms of an attitude index, which he and his colleagues at Michigan were able to show made a net contribution to the explanation of auto and other major durable goods purchases even after fluctuations in income were taken into account.

This index, and others like it, have proven especially effective in explaining variations in consumer durable goods purchases over time, though it has not been as successful as data on consumer intentions to buy for explaining variations in purchases among households at the same point in time. In fact, the latter also constitutes a behavioral measure.

In effect, attitudes or attitude indexes have become the measuring instrument for reflecting consumer desire for products. A number of such approaches currently exist, though the attitude index approach of Katona seems to be the most successful so far. From an analytical point of view, these approaches may be divided into two types -- those that seek to explain the purchase of a product, and those that seek to explain the selection of a brand given that a purchase is made. The attitude index approach of Katona focuses on the former problem. The same is true of the field force theory of Kurt Lewin which was applied to marketing some years ago by Warner Bilkey.[1] By that approach, consumers were asked to indicate on a set of scales the intensity of their desires and also of offsetting costs (valences) toward purchasing particular products, the idea being that a purchase will be made when the sum of the positive valences sufficiently exceeds the sum of the negative valences.

Still a third approach with applications primarily to product purchase is the need achievement theory of McClelland, explained in an article in the July issue of the Journal of Marketing by Charles Schewe. By this approach, the psychological make-up of an individual will dictate what sort of products he is likely to buy. It might be noted rather parenthetically that a similar approach was used in an attempt to differentiate between purchasers of different brands of automobiles but with no success.[2]

The prediction of brand choice given that a purchase has been made seems to have occupied marketing researchers much more than the

prediction of a purchase. Since marketing researchers discovered Morris Fishbein, and vice versa, the journals have been full of attempts to develop attitude indexes to reflect preference for different brands of a product based on weighted sums of product attributes and importance ratings. While this has undoubtedly contributed to increasing the lists of publications of quite a few people, it is not at all clear that the results are any better, or even as good, as the very simple approach reported some time ago of asking individuals which brand they would buy if they were to make a purchase of that product.[3]

Considering the variables involved and the current state of forecasting, it seems to me that marketing researchers have been placing too much emphasis on using concepts from attitude theory to explain brand purchases and too little to explain product purchases. After all, the key problem is to anticipate sales of the <u>product</u>, which for many products may vary substantially from one year to another, whereas for most products brand shares change very little from one year or quarter to another. Hence, the real potential for the use of attitude indexes in marketing research would seem to lie in the development of better models that combine attitudinal variables with other variables to explain and predict the purchases of a particular product.

Such models have already been developed by economists from a broad aggregative point of view, as exemplified by the FRBMIT and the Brookings models.[4] A recent article by Juster and Wachtel in the <u>Brookings Economic Papers</u> provides another good example of how such indexes may be combined with other variables.[5] The problem for marketing researchers

is to adapt these indexes and approaches to focus on individual products, expecially in the case of major durables and services.

Decision-Making

The role of different family members in purchase decisions and the sources from which information for such decisions are obtained have been studied primarily by sociologists and home economists. More recently, some attention has been given to these questions in marketing research but with the impetus still from these other fields. Thus we know, for example:

1. That by hindsight financial decisions will more likely be considered satisfactory if there was more frequent consultation of sources of information and of people outside of the family.[6]
2. Joint decision-making is especially frequent among younger families, middle-income families, and when a couple has been married fairly recently.[7]
3. That joint decision-making is likely to be associated with satisfaction in marriage.[8]
4. That the wife is increasingly exerting the main influence on money management, especially if she is employed.[9]
5. That joint decisions on the purchase of major household goods is made only about half the time.[10]
6. That joint decision-making on purchases is more frequent among younger families and middle-class families and when the purchase involves a substantial outlay relative to income.[11]

7. That many different types of decisions may be involved in a single major purchase and that the same family members may not play the same role in each one of the decisions.[12]
8. That decision roles in the major purchase of one product may be different from the decision roles of the same family members in the major purchase of another product.[13]
9. That possibly half of all supermarket purchases are not planned, as is also true of at least one-third of major durable goods purchases.[14]

If one thing is clear from this very brief summary, it is that the identity of the decision maker for numerous purchases will vary substantially from one family to another. If so, the very real and significant question for marketing research becomes to investigate whether and how the purchase of a product (or of a particular brand) may vary with the identity of the decision maker.

That purchase patterns and individual purchases may depend on the identity of the decision maker is a very real possibility, and receives support from a recent study by Lucy Lee and myself on our panel data on young married couples in Peoria and Decatur.[15] As part of this study, the so-called family financial officer was pinpointed in each of the families on the basis of a series of screening questions as being either the wife, the husband, both jointly or not clear. As it turned out, a family financial officer could be pinpointed on the basis of these questions in 97% of the sample families.

Relating this information to financial and purchase behavior, we found that if the husband alone was the family financial officer, the couple was more likely to save a higher proportion of its income and to put more of its assets into the form of real estate and negotiable securities, that is, it was more likely to make speculative investments. At the same time, auto purchases were less frequent if the husband was the family financial officer. These results were supported by multiple regressions in which the identity of the family financial officer was entered as a dummy variable.

The relation of family decision-making to purchase patterns and brand choice would therefore seem to be a fertile field for study by both business and academic people alike.

The Permanent Income Concept

One of the most provocative economic theories in recent decades is that propounded by Milton Friedman nearly 20 years ago to the effect that consumption expenditures are determined not by the current level of income of the family but by its idea of the average income it can expect to receive per year over its lifetime. Since the theory is explained very well in a number of sources,[16] it need only be mentioned here that by this theory a family's total income as well as consumption in a particular period, say a year, is divided into permanent and transitory components. The hypothesis is that only the permanent components of income and consumption are related to each other while the transitory components are related neither to each other nor to the permanent components.

While later empirical work has placed considerable doubt on the validity of these individual hypotheses,[17] these studies have also shown that the concept of permanent income is highly meaningful for analytical purposes and for understanding consumer behavior. Thus, it is clearly feasible to divide income and also consumption expenditures into permanent and transitory components. Also, the propensity to consume out of the permanent component, while not in accord with the original theory, seems to be very different than the propensity to consume out of transitory income, at least with regard to total expenditures and with regard to total expenditures for durable goods. In other words, being able to segregate income into permanent and into transitory components seems likely to yield a better understanding of both total expenditures and many of its components.

Moreover, some very interesting work has also been done on the determinants of spending out of transitory income, which suggests that a relatively small amount of such income is likely to be spent, while a larger amount is either likely to be saved or spent later on a major durable good.[18]

In view of all these provocative findings, one may well ask how the permanent income concept has been applied to marketing research. The surprising answer is that, to the best of my knowledge, not a single such application has yet been attempted, even though the theory is, as mentioned before, nearly 20 years old.

The logical product areas of application would be major durables, financial services and major services other than financial, such as

vacations. Topics for investigation might include the extent to which better explanations and forecasts of such expenditures by individual families can be obtained by use of this concept, and whether particular products and services may not be especially sensitive to fluctuations in transitory rather than in permanent income. (I might add parenthetically that there are various ways of estimating the permanent income of a family, but that is outside the scope of the present paper.)

Also worthy of investigation would be whether for the same product particular brands are perhaps more likely to be purchased out of transitory rather than out of permanent income. Thus, one hypothesis that might be tested is whether brand loyalty varies in inverse proportion to the relative amount of transitory income received by a family, for might not windfall income be more likely to be spent in trying out different products or different brands of a particular product?

Concluding Comment

In this paper I have tried to present three general concepts from different behavioral sciences and indicate how they might be applied to marketing research. In one instance applications have already been made but many potentially more fruitful applications remain to be made; in the other two instances the possibilities are wide open.

Needless to say, these are not the only concepts from the behavioral sciences that might have been discussed in this context, and other people might consider others more relevant. Indeed, there are others I could have discussed, but space does not permit this. Also, if I did, I would have nothing left to use in future papers...

FOOTNOTES

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4. Such as deLeeuw, F., and Gramlick, E., "The Federal Reserve-MIT Econometric Model," Federal Reserve Bulletin, 54, January 1961.

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6. Schomaker, P. K., and Thorpe, A. C., "Financial Decision-Making as Reported by Farm Families in Michigan," Quarterly Bulletin, Michigan State University, 46, November 1963.

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10. Wolgast, op. cit.; Sharp and Mott, op. cit.

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12. Davis, H. L., "Determinants of Marital Roles in Consumer Purchase Decisions," unpublished working paper, Graduate School of Business, University of Chicago, October 1970; also Jaffe, L. J. and Senft, H., "The Roles of Husbands and Wives in Purchasing Decisions," in Adler, Lee and Crespi, Erving, (eds.), Attitude Research at Sea. Chicago: American Marketing Association, 1966, pps. 95-110.

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15. Ferber, Robert, and Lee, Lucy Chao, "Husband-Wife Influence in Family Financial Economic Behavior," College of Commerce and Business Administration, University of Illinois at Urbana, Working Paper 81, 1973.

16. For an especially good explanation see, Mayer, Thomas, Permanent Income, Wealth and Consumption, Berkeley and Los Angeles, California: University of California Press, 1972; also the original exposition in Friedman, Milton, A Theory of the Consumption Function, New York: National Bureau of Economic Research, 1955.

17. Mayer, Thomas, op.cit.; also Ferber, Robert, "Trends in Consumer Economics," to be published in Journal of Economic Literature.

18. Landsberger, Michael, "Windfall Income and Consumption: Comment," American Economic Review, 56, June 1966.